GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA

UNSTARRED QUESTION NO:1672
ANSWERED ON:02.08.2000
GENETICALLY ENGINEERED CROPS
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Will the Minister of AGRICULTURE be pleased to state:

(a) whether Indian Council of Agriculture Research (ICAR) has developedgenetically engineered crops, rice and pigeon pea that are resistant to devastating pests;

(b) if so, the details thereof;

(c) whether these varieties are made available to farmers; and

(d) if so, the details thereof along with the details of other projects undertaken by ICAR under National Agriculture Project?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (DR. DEBENDRA PRADHAN)

(a) & (b) The Indian Council of Agricultural Research has developed genetically engineered rice through transfer of gene Cry1 Aa from a bacterium, Bacillus thuringiensis (Bt), with the objective to impart resistance to stem borer. These transgenics are being evaluated, and the bioassy in the containment facility have shown that these carry the resistance to stem borer. These will be further evaluated in the containment facility followed by field trials before these are considered for release for general cultivation by farmers. In pigeon pea, no transgenic has been developed as yet. The work is at the initial stages (in tissue culture stage prior to transfer of gene).

(c) & (d) So far, no transgenic crop variety has been made available to farmers for general cultivation. Production of transgenics is only the first step in the development of genetically engineered crop varieties. Transgenics need to be evaluated from farm-worthiness and biosafety before these are recommended for adoption by farmers.

Keeping in view the growing importance of plant biotechnology, Indian Council of Agricultural Research has initiated research in this field in important crops. The research is being supported through Plan Projects, Cess Fund Adhoc Project and National Agricultural Technology Project (NATP). The mission mode project under NATP are:

i) By transgenic pigeon pea, rice and cotton for insect resistance.

ii) Isolation of plant genes and promoters for developing transgenic crop plant resistant to insect pests.